



Idle Free Business Toolkit:

Turn the Key for Cleaner Fleets



What is idling?

Idling occurs when a vehicle's main engine is running but the vehicle is not moving



Idling Facts

- Modern engines do not need warming
 - The best way to warm a fuel-injected gasoline engine is to drive it
 - Modern diesel engines should take no more than 3 minutes to warm up
- Stopped for more than 10 seconds? Turn it off!
 - Restarting a vehicle uses less fuel than idling for 10 seconds



Some Idling is Necessary

- Idling may be necessary to:
 - Ensure operator safety
 - Operate medical and other equipment in emergency situations
 - Maintain, repair, and inspect vehicles
 - Obey traffic signals or while stuck in traffic



Some Idling is Avoidable

- Idling may be avoided through changes in behavior
 - Waiting inside a building instead of in an idling vehicle
 - Go in instead of using drive-thru services
 - Planning pick-ups/drop-offs instead of queuing



Some Idling is Avoidable

- Idling may also be avoided through the use of technology
 - Operating onboard equipment with an auxiliary power unit (APU) instead of the main engine
 - Using electrified parking stations when available instead of idling for extended periods
 - Conditioning air with direct fired heaters and coolant systems instead of the main engine
 - Using automatic engine shut-off systems to help change habits of fleet drivers

Some Idling is Unnecessary

- Idling may be unnecessary when:
 - Warming up a vehicle*
 - The engine is running for comfort or convenience while waiting or working in the vehicle
 - A driver is “only going to be stopped for a minute”
 - The vehicle is parked and the windows are down
 - No one is in the vehicle†
 - It is done out of habit



Benefits of Idling Reduction

- Improved air quality
 - Attainment of more stringent air quality standards
 - Avoid violations and future nonattainment designations
 - Reduce emissions of toxics and GHGs



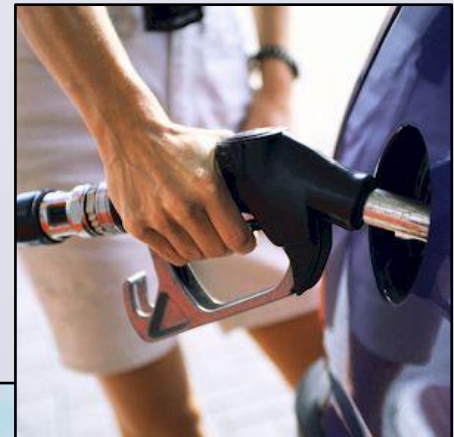
Benefits of Idling Reduction

- Improved public health
 - Reduce asthma attacks and other respiratory illnesses
 - Reduce cancer risk from toxic air contaminants
 - Reduce emergency room visits, hospitalizations, and doctor visits
 - Reduce the number of Air Quality Alert days, when pollutants can reach unhealthy levels



Benefits of Idling Reduction

- Improved economic health
 - Encourage economic growth
 - Improved quality of life
 - Reduce fuel and maintenance costs



Reducing Fuel Costs

Gasoline Engines

- Average driver spends 6 minutes per day idling^{*}
- Louisville motorists waste more than 4 million gallons of gasoline per year idling unnecessarily

Diesel Engines

- Average long haul diesel truck idles for 1800 to 2400 hrs/yr[†]
- A diesel truck at idle consumes ~1 gal/hr[‡]
- Cost of idling averages \$6100 per truck annually^Ω

Reducing idling significantly reduces costs

^{*} Costly Myths: An analysis of idling beliefs and behavior, Carrico et al., 2009

[†] Stodolsky et al., 2000; U.S. EPA, 2004

[‡] From <http://www.in.gov/idem/4459.htm>

^Ω Based on 2100 hrs of idling at \$2.90/gal

Reducing Maintenance Costs

- A truck idling for one hour suffers wear and tear equivalent to being driven seven miles*
- Operating life of engine oil is reduced by 75 percent due to prolonged idling, from 600 engine hours to 150 engine hours†



How can my business reduce idling?

- Create an idle reduction policy that fits your business
- Communicate the policy
- Promote the policy



SAMPLE Idle Reduction Policy for Company/Agency Fleet Vehicles

Background

Air pollution, particularly ground-level ozone and fine particulate matter, is an immediate and ongoing concern in Louisville. It impacts citizen health, economic growth, and quality of life. Vehicle exhaust, including exhaust from idling vehicles, contributes significantly to air pollution in our community.

Statement of Purpose

This policy is intended to protect the health of drivers, the public, and the environment from exposure to vehicle exhaust; reduce wear on vehicle engines; decrease fuel consumption; and minimize operational costs.

Definition

For the purpose of this policy, a "fleet" is defined as all vehicles owned, rented, or leased by (Company/Agency) or operated for the purpose of conducting business on behalf of (Company/Agency).

Statement of Policy

It is the policy of (Company/Agency) that drivers of (Company/Agency) fleet vehicles turn off vehicle engines (i.e., not idle) when a vehicle will be stopped for more than 1 minute, except when in traffic. This policy applies, but is not limited, to the following situations:

- When loading or unloading goods or personnel
- When stopped for road construction
- When waiting at a drive-through window
- When stopped and waiting for any reason (except in traffic, such as when stopped at a traffic light)

Turning off vehicles when stopped does not apply for the period or periods during which any under the following circumstances:

- To provide for the safety of vehicle occupants, such as in cases of **extreme** hot or cold conditions to run the air conditioner or heater under extreme heat or cold;
 - To operate power take-off equipment or auxiliary equipment performing work.
 - When stopped in traffic, such as when waiting at a traffic light.
 - In specific traffic, safety, or emergency situations arise.
- In above exemption cases (except exemption 3), if equipment can be run from the battery, refrain from idling unless there is a significant concern of draining the battery.

This policy will be effective immediately from the date of signature.

Day of (Month), 20XX.

Signature



TURN OFF YOUR CAR IF
YOU'LL BE HERE MORE
THAN 10 SECONDS.

www.helptheair.org

Create an Idle Reduction Policy

- Identify when idling occurs during the course of your business
 - Do you have a fleet?
 - Do you receive deliveries?
 - Do customers come to your location?
- Commit to a time limit for idling



Create an Idle Reduction Policy

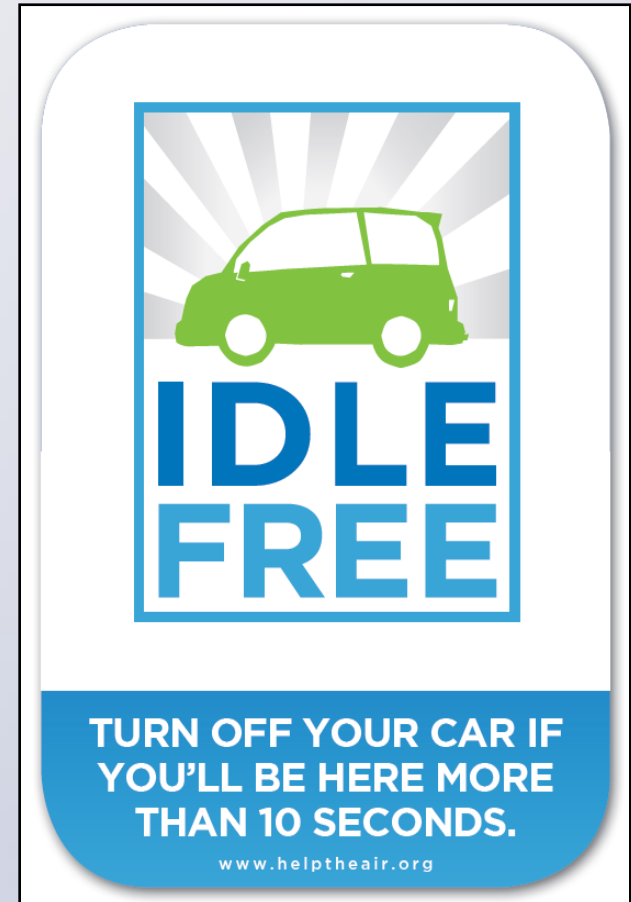
- Acknowledge exemptions for idling that may be necessary to
 - Protect employee safety
 - Use equipment needed to perform work
- APCD's Idle Free Business Toolkit includes sample Idle Reduction Policies for:
 - Company/Agency property
 - Company/Agency fleet vehicles

Communicate the Policy

- Put it in writing
 - Distribute letters that establish and explain a new idling policy to:
 - All employees, especially fleet drivers
 - Vehicles visiting your business
 - APCD's Idle Free Business Toolkit includes sample letters for:
 - All employees regarding idling on Company/Agency property
 - Visitors to company/agency property including delivery drivers, customers, etc.
 - Employees that drive fleet vehicles

Communicate the Policy

- Put up signage
 - Communicate your policy with customers and others visiting your business through signs, posters, window decals, etc.
 - APCD's Idle Free Business Toolkit includes sample artwork for a variety of uses



Promote the Policy

- Continue to educate employees
 - APCD's Idle Free Business Toolkit includes fact sheets with information that can be:
 - Included in an employee newsletter
 - Posted on a bulletin board
 - Discussed at staff meetings
- Remind employees often
 - Consider putting reminder stickers on the dashboard in company vehicles



Looking for a simple way to reduce your organization's environmental footprint?

Avoid unnecessary engine idling.

Establishing an idling reduction policy can help you:

- Protect employee health
- Save on fuel costs
- Reduce engine wear



From policy templates to artwork for signage around your facility, The Idle Free Louisville Campaign offers support at no cost to help you develop a program that fits the needs of your organization.



Do your part.

Create an idle reduction policy today!

(502) 574-6000 | www.louisvilleky.gov/APCD/Idling

Resources

- Idle Free Business Toolkit

<http://www.louisvilleky.gov/APCD/Idling/BusinessToolkit>



- KAIRE - Kentuckiana Air Education

<http://www.helptheair.org>

- Idling Reduction Savings Calculator

<http://www.transportation.anl.gov/pdfs/TA/361.pdf>